### Patient Specific Risks

<table>
<thead>
<tr>
<th>Substance Use Disorder (SUD)</th>
<th>- History of SUD is the strongest risk factor for developing opioid misuse or OUD</th>
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| Bipolar Disorder or Schizophrenia | - Patients with mental health disorders are more likely to be at risk for drug overdose  
- Bipolar disorder may cause manic episodes to occur, *reducing your impulse control* and leading to excessive consumption of your prescription opioids  
- Concurrent use of opioids and sedating psychotherapeutic medications *increases the risk of CNS and respiratory depression* |
| Cerebrovascular Disease | - Opioids may worsen cognitive impairment, confusion or cause hallucinations  
- Risk of overdose is greatest during first 3 to 7 days after starting an opioid or increasing its dose |
| Chronic Kidney Disease with Renal Impairment | - Renal impairment slows down the rate at which opioids are excreted from the body thus creating a higher risk for OD  
- Risk for overdose *greatest during opioid initiation and dose escalation*  
- **65+ Patients:** Lower dose, use caution when initiating opioids due to age-related renal changes |
| Heart Failure | - Certain opioids and their metabolites may have decreased clearance (increases risk of over-sedation, hypotension, bradycardia, respiratory depression)  
- Cognitive impairment is common and can increase the risk for overdose  
- **Older Patients:** Increased risk for opioid-induced respiratory depression due to comorbidities (i.e CHD, COPD, stroke in addition to heart failure) |
| Non-malignant Pancreatic Disease | - Chronic pancreatitis opioid-treated patients have high prevalence of strong risk factors for opioid overdose  
- Pancreatic disease may result in accelerated gastric emptying/malabsorption, causing a decrease in drug absorption and resulting in patients taking higher opioid doses |
| Chronic Pulmonary Disease | - **Patients with COPD and sleep apnea:** Higher risk for opioid-related toxicity/overdose and overdose-related death  
- **60+ Patients:** Increased risk of respiratory depression  
- **60+ Patients with COPD and co-occurring CHD, heart failure, OSA, asthma, or stroke:** Increased risk of opioid-induced respiratory depression |
| Chronic Headache | - **Frequent headache patients:** Underuse of prophylactic migraine medications may lead to overuse of opioid analgesic overuse to handle recurrent migraines  
- **Medication-overuse headache (MOH):** If opioids are used more than 10 times a month for migraines. patient can become dependent  
- **Patients with co-occurring mental health disorder(s) and recurrent headache:** Higher risk for developing opioid use disorder and high risk of opioid-related overdose |

*If the patient concomitantly is on the following drugs:*

Concurrent use of CNS depressants and Opioids can result in sedation, respiratory depression, coma, & death

| Fentanyl | - Fentanyl is *substantially more potent than morphine* and is associated with an increased risk for overdose  
- **Patients with Renal Impairment:** Fentanyl has reduced clearance and may cause increased fentanyl plasma levels, leading to respiratory depression and over-sedation  
- **18+ Patients with Cancer:** Rapid-onset, short acting fentanyl dosage forms used for management of breakthrough pain |
| **Morphine** | • Morphine use (ER/LA) is associated with an increased risk for serious opioid-induced respiratory depression  
• **Patients with Renal Impairment:** Accumulation of morphine metabolite may lead to over-sedation, respiratory depression, and neuro-excitatory effects |
| **Methadone** | • **Risk of overdose increases for these patients:** At the initiation of therapy and following dose increase, on complex medication regimens, with severely impaired renal or hepatic function  
• **Patients with high degree of opioid tolerance:** Fatal methadone overdose has happened during changing to methadone or start of methadone treatment  
• Concurrent use of methadone with amitriptyline, fluvoxamine, biaxin, ciprofloxacin, fluconazole, or voriconazole can inhibit its metabolism. This may cause an increase in plasma levels and the risk of unintentional overdose  
• **Patients with Renal Impairment:** Accumulation of morphine metabolite may lead to over-sedation, respiratory depression, and neuro-excitatory effects |
| **Hydromorphone** | • Hydromorphone is associated with a greater risk for serious opioid-induced respiratory depression  
• **Patients with Renal Impairment:** Clearance of hydromorphone and its metabolites is reduced, and accumulation may lead to respiratory depression, neuroexcitatory effects, and over-sedation  
• **Patients with Severe Hepatic Impairment:** Hydromorphone should be avoided  
• Concurrent use of hydromorphone and other CNS depressants can result in sedation, respiratory depression, coma, and death |
| **ER/LA formulation of any prescription opioid** | • Patients treated with ER/LA opioid formulations have a **greater risk for unintentional overdose and death** opposed to those taking immediate release or short acting opioid formulations  
• **Chronic, non-cancer pain in opioid-naive patients:** Risk of overdose is considerably high during the first 2 to 4 weeks after start of ER/LA opioid therapy  
• Risk for overdose greatest during start of an ER/LA opioid and after each dosage increase |
| **A prescription benzodiazepine** | • Concurrent use of a benzodiazepine and opioid has been **alarmingly identified in prescription drug overdose deaths**  
• Benzodiazepine withdrawal holds more risk compared to opioid withdrawal, as serious issues can occur such as seizures, delirium, anxiety, or insomnia  
• **Recommendation:** Taper benzodiazepines slowly over months to avoid harmful consequences from happening to patient  
• **Patients with Insomnia:** Avoid using benzodiazepines |
| **A prescription antidepressant** | • Certain antidepressants are more sedating than others and can increase the risk of respiratory depression and/or over-sedation when used with opioids  
• Increased opioid plasma levels may occur in pharmacokinetic interactions between certain antidepressants and opioids, increasing the risk of opioid toxicity  
• **Patients with an active, unstable mental health disorder or uncontrolled suicide risk:** Heightened risk for drug overdose  
• **Patients treated with concurrent opioids and antidepressants:** Risk for overdose greatest during first 3 to 7 days after starting an opioid or increasing its dosage |
| **Is the patient’s current maximum prescribed opioid dose ≥ 100 MME/day** | • Risk for serious opioid-related toxicity, such as overdose and death, steadily increase with the average daily opioid dose  
• Opioid doses ≥ 100 MME/day **substantially increase the risk of overdose** compared to lower doses, such as <20 MME/day  
• **Patients taking high doses for Chronic Non-Cancer Pain (≥ 90 MME/day):** Tapering opioid dosage should be based on **assessment of benefits versus risks.** Consider tapering opioid therapy to reduced dose or discontinuation if pain or benefits are small or risks are high |